

**CLAIMS**

What is claimed is:

1. A grey gold alloy comprising, expressed by weight, Au between 75% and 76% and Pd between 5% and 14%, wherein said alloy furthermore contains between 7% and 17% Cu, wherein the proportion of Cu being approximately inversely proportional to that of Pd, and wherein the balance being formed by at least one of the elements Ir, In, Ag, Zn, Ga, Re, Zr, Nb, Si, Ta and Ti, wherein said alloy is substantially free of Ni, Co and Fe.

2. The alloy according to Claim 1, wherein said alloy furthermore contains between 12% and 14% by weight Pd, between 7% and 11% by weight Cu, between 1% and 4% In and between 0.01% and 4% by weight of at least one of the elements Ir, Re, Ga, Zn, Si, Nb, Ta and Ti.

3. The alloy according to Claim 2, wherein said alloy contains between 0.2% and 0.4% by weight Ga.

4. The alloy according to Claim 1, wherein said alloy contains between 5% and 7% Pd, less than 5% Ag, less than 7% Zn, and wherein the balance comprising at least one of the elements Ir, In, Ta, Si, Ga and Ti in a proportion of between 0.002% and 0.015% by weight.